

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for determining a location of a device by identifying an ambient environmental source emitting a base frequency and waveform signal emitted by an environmental source in the vicinity of the device, the method comprising the

5 steps of:

a) measuring the waveform signal of the source in a predetermined time-interval;

b) estimating the emitted waveform characteristic of the measured waveform, said estimating including estimating the base frequency;

c) determining a number of actions based on the estimated characteristic comparing the estimated waveform characteristics with stored waveform characteristics associated with various locations, and

15 choosing the location based on said comparison.

2. (Currently Amended) A method according to claim 1, wherein the determined number of actions comprises comparison of the waveform characteristic with a unique waveform characteristic with affiliated information stored in a memory said method further

5 comprises the step of:

if said comparison fails to identify a stored waveform characteristic, storing said estimated waveform characteristic as associated with a new location.

3. (Cancelled) .

4. (Currently Amended) ~~A-The method according to as claimed in~~ claim 1, wherein a fast Fourier transform derives the base frequency of the estimated waveform characteristic.

5. (Currently Amended) ~~A-The method according to as claimed in~~ claim 1, wherein undesired signals included in said measured waveform signal are ~~may be~~ suppressed.

6. (Currently Amended) ~~A-The method according to as claimed in~~ claim 1, wherein the base frequency is refined by finding a maximum in an autocorrelation function of the estimated waveform characteristic.

7. (Currently Amended) ~~A-The method according to as claimed in~~ claim 1, wherein the estimated waveform characteristic is computed by averaging a number of estimated waveform characteristics.

8. (Currently Amended) ~~A-The method according to as claimed in~~ claim 1, wherein a phase shift is applied to the estimated waveform.

9. (Cancelled) .

10. (Currently Amended) ~~A-The method according to as claimed in~~  
claim 1, wherein the method allows locating a relative orientation  
of a ~~detector~~ ~~the~~ device and the environmental source by use of two  
or more emission detectors.

11. (Currently Amended) ~~A-The method according to as claimed in~~  
claim 1, wherein the method ~~may predict~~~~predicts~~ and suppresses a  
specific periodic signal.

12. (Currently Amended) ~~A-The method according to as claimed in~~  
claim 1, wherein the environmental source is a source emitting  
light.

13. (Currently Amended) ~~A-The method according to as claimed in~~  
claim 1, wherein the environmental source is a source emitting  
sonic signals.

14. (Currently Amended) ~~A-The method according to as claimed in~~  
claim 1, wherein the environmental source is a source emitting  
electromagnetic signals.

15. (Currently Amended) A The method according toas claimed in  
claim 1, wherein the environmental source is a source emitting  
mechanical movement signals.

16. (Currently Amended) A system for determining a location of  
a device by identifying an environmental source emitting a ambient  
base frequency and waveform signal emitted by an environmental  
source in the vicinity of the device, the system comprising means  
5 for:

- a) means for measuring the waveform signal of the source in a  
predetermined time-interval;
- b) means for estimating the emitted waveform characteristic  
of the measured waveform, said estimating including estimating the  
10 base frequency;
- c) determining a number of actions based on the estimated  
characteristiemeans for comparing the estimated waveform  
characteristics with stored waveform characteristics associated  
with various locations; and

15 means for outputting the associated location based on said  
comparison.

17. (Currently Amended) A The system according toas claimed in  
claim 16, wherein the determined number of actions comprises  
comparison of the waveform characteristic with a unique waveform  
characteristic with affiliated information stored in a memorysaid  
5 system further comprises:

means for storing said estimated waveform characteristic as associated with a new location if said comparison fails to identify a stored waveform characteristic.

18. (Cancelled).

19. (Currently Amended) A computer readable medium containing a program for making a processor carry out the method of ~~as claimed in claim 1.~~